

Claims

1 1. A method for analyzing performance of an electrical design, comprising:
2 receiving a plurality of package files, wherein each package file is descriptive of a
3 portion of the electrical design and defines a reference connection;
4 selectively and logically linking first and second package files of the plurality of
5 package files by correlating respective reference connections of each of the first and second
6 package files; and

7 processing the logically linked first and second package files to determine a
8 performance characteristic of the electrical design.

1 2. The method of claim 1, further comprising determining a second performance
2 characteristic by selectively modifying contents of the first package file while preserving
3 contents of the second package file.

1 3. The method of claim 1, wherein selectively and logically linking the first and the
2 second package files further includes linking the first and the second package files
3 according to configuration file instructions.

1 4. The method of claim 1, wherein receiving the plurality of package files further
2 includes generating the package files from a group of data consisting of at least one of:
3 logical data, physical data and electrical data.

1 5. The method of claim 1, further comprising separately storing each package file.

1 6. The method of claim 1, wherein selectively and logically linking the first and the
2 second package files further includes generating a net file having characteristics of both the
3 first and the second package files.

1 7. The method of claim 6, further comprising selectively and logically linking the
2 net file with another net file.

1 8. The method of claim 1, wherein receiving the plurality of package files further
2 includes receiving an incomplete package file.

1 9. The method of claim 1, wherein correlating respective reference connections of
2 each of the first and second package files further includes correlating a connection selected
3 from a group consisting of at least one of: a connection pin, another physical data point, a
4 logical data point and an electrical data point.

1 10. The method of claim 1, further comprising assigning an electrical characteristic
2 to a portion of the first package file.

1 11. The method of claim 1, further comprising selectively modifying a portion of
2 the first package file while preserving a remaining portion of the first package file.

1 12. The method of claim 1, wherein correlating respective reference connections of
2 each of the first and second package files further includes programmatically locating the
3 reference connections.

1 13. The method of claim 1, wherein processing the logically linked first and second
2 package files further includes generating an output selected from a group consisting of at
3 least one of: an analog waveform, noise data and timing data.

1 14. The method of claim 1, further comprising using the first package file in a
2 subsequent simulation.

1 15. An apparatus, comprising:
2 a memory;
3 a database resident in the memory, the database storing a plurality of package files,
4 each package file of the plurality of package files being descriptive of a portion of an
5 electrical design and having a reference connection correlating to a respective reference
6 connection of another package file of the plurality; and
7 a program for selectively stitching first and second package files of the plurality of
8 package files by correlating the respective reference connections of the first and second
9 package files; the program being further configured to initiate processing of the stitched
10 first and second package files to determine a performance characteristic of the electrical
11 design.

1 16. The apparatus of claim 15, wherein the program initiates determining a second
2 performance characteristic by selectively modifying contents of the first package file while
3 preserving contents of the second package file.

1 17. The apparatus of claim 15, wherein the program initiates stitching the first and
2 the second package files according to configuration file instructions.

1 18. The apparatus of claim 15, wherein the program initiates generating the
2 plurality of package files from a group of data consisting of at least one of: logical data,
3 physical data and electrical data.

1 19. The apparatus of claim 15, wherein the program initiates separately storing
2 each package file.

1 20. The apparatus of claim 15, wherein the program initiates generating a net file
2 having characteristics of both the first and the second package files.

1 21. The apparatus of claim 20, wherein the program initiates selectively and
2 logically linking the net file with another net file.

1 22. The apparatus of claim 15, wherein the generation of the first package file is
2 incomplete as the processing initiates.

1 23. The apparatus of claim 15, wherein the program initiates correlating a
2 connection selected from a group consisting of at least one of: a connection pin, another
3 physical data point, a logical data point and an electrical data point.

1 24. The apparatus of claim 15, wherein the program initiates assigning an electrical
2 model to a portion of the first package file.

1 25. The apparatus of claim 15, wherein the program initiates selectively modifying
2 a portion of the first package file while preserving a remaining portion of the first package
3 file.

1 26. The apparatus of claim 15, wherein the program automatically initiates locating
2 the reference connections.

1 27. The apparatus of claim 15, wherein the program initiates locating the reference
2 connections according to user input.

1 28. The apparatus of claim 15, wherein the program initiates generating an output
2 selected from a group consisting of at least one of: an analog waveform, noise data and
3 timing data.

1 29. The apparatus of claim 15, wherein the program initiates reusing the first
2 package file in a subsequent simulation.

- 1 30. A program product, comprising:
 - 2 a program configured to selectively stitch first and second package files of a
 - 3 plurality of package files by correlating respective reference connections of the first and
 - 4 second package files, wherein each package file is descriptive of a portion of an electrical
 - 5 design; the program being further configured to initiate processing of the stitched first and
 - 6 second package files to determine a performance characteristic of the electrical design; and
 - 7 a signal bearing medium bearing the first program.

- 1 31. The program product of claim 30, wherein the signal bearing medium includes
- 2 at least one of a recordable medium and a transmission-type medium.